



LCD TV

Service Manual

MODEL: LCT-37EL0SST

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IMPORTANT SAFETY PRECAUTION

Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your LCD colour TV product, please read the following precautions carefully before using the product.

1. Read instructions—All operating instructions must be read and understood before the product is operated.
2. Keep this manual in a safe place—These safety and operating instructions must be kept in a safe place for future reference.
3. Observe warnings—All warnings on the product and in the instructions must be observed closely.
4. Follow instructions—All operating instructions must be followed.
5. Attachments—Do not use attachments not recommended by the manufacturer. Use of inadequate attachments can result in accidents.
6. Power source—This product must operate on a power source specified on the specification label. If you are not sure of the type of power supply used in your home, consult your dealer or local power company.
7. AC cord protection—The AC cords must be routed properly to prevent people from stepping on them or objects from resting on them. Check the cords at the plugs and product.
8. Overloading—Do not overload AC outlets or extension cords. Overloading can cause fire or electric shock.
9. Entering of objects and liquids—Never insert an object into the product through vents or openings. High voltage flows in the product, and inserting an object can cause electric shock and/or short internal parts. For the same reason, do not spill water or liquid on the product.
10. Servicing—Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified service person to perform servicing.
11. Repair—If any of the following conditions occurs, unplug the AC cord from the AC outlet, and request a qualified service person to perform repairs.
 - a. When the AC cord or plug is damaged.
 - b. When a liquid was spilled on the product or when objects have fallen into the product.
 - c. When the product has been exposed to rain or water.
 - d. When the product does not operate properly as described in the operating instructions.
Do not touch the controls other than those described in the operating instructions. Improper adjustment of controls not described in the instructions can cause damage, which often requires extensive adjustment work by a qualified technician.
 - e. When the product has been dropped or damaged.
 - f. When the product displays an abnormal condition. Any noticeable abnormality in the product indicates that the product needs servicing.
12. Replacement parts—In case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorized parts can result in fire, electric shock and/or other danger.
13. Safety checks—Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.
14. Wall or ceiling mounting—When mounting the product on a wall or ceiling, be sure to install the product according to the method recommended by the manufacturer.

- **Cleaning**—Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.



- **Water and moisture**—Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.



- **Do not place vases or any other water-filled containers on this product.** The water may spill onto the product causing fire or electric shock.



- **Stand**—Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.



- **When relocating the product** placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.



- **Ventilation**—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.



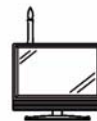
- The LCD panel used in this product is made of glass. Therefore, it can break when the product is struck forcefully or with a sharp object. If the LCD panel is broken, be careful not to be injured by broken glass.



- **Heat sources**—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).



- **To prevent fire, never place any type of candle or naked flames on the top or near the TV set.**



- **To prevent fire or shock hazard, do not place the AC power cord under the TV set or other heavy items.**



- **Do not place heavy objects on this product or stand on it.** Doing so could cause injury if the product overturns. Take special care near children and pets.



The LCD panel is a very high technology product with 1,555,200 thin film transistors, giving you fine picture details.

Due to the very large number of pixels, occasionally a few non-active pixels may appear on the screen as a fixed point of blue, green or red.

This is within product specifications and does not constitute a fault.

Precautions when transporting the TV

When transporting the TV, never carry it by holding onto the speakers. Be sure to always carry the TV by two people holding it with two hands—one hand on each side of the TV.



SPECIFICATION

Panel	Panel Type	37" Wide TFT Color LCD	
	Display Area	819.6mm × 460.8mm(37.02 inch(940.3mm)diagonal	
	Display Color	(8bit) 16.7 million	
	Pixel Pitch	0.2 mm × 0.6 mm × RGB	
	Recommended Resolution	1366 × 768	
	Contrast Ratio	500:1 (typical)	
	Luminance white	500cd/㎡ (Center 1 Point Typ.)	
	Viewing Angle	Free View Angle(R/L 176, U/D 176)	
In/Out	PC	Analog RGB 15 pin D-Sub Input	
	Video	S-video input	
		SCART input	
		Video input(RCA) × 2	
		Component input	
		PC (Analog RGB) input	
		HDMI	
	Audio	Component/S-Video input	
		SCART input	
		Audio input(RCA) × 2	
		Audio output (RCA)	
		PC Audio input	
		COAXIAL/OPTICAL output	
	Euro A/V	SCART (Half)	
RF Signal	Antenna	75Ω Coaxial cable (Analog)	
	Color System	PAL / SECAM	
	Sound System	B/G , D/K , I , L	
	Stereo Type	NICAM , A2	
	Text	TELETEXT	
Others	Power Consumption	192 Watts	
	Power Save Mode	Less than 6 Watts	
	Speaker	10 Watts *2	
		Size	19(W) * 11.5(D) * 59(H) cm
			7.48(W) * 4.52(D) * 23.22(H) inch
		Weight	2.2Kg/4.84 pounds(gross)

	Plug & Play	DDC 1/2 B	
	Screen Control	True Colour On Screen Display Menu, Bit Map	
	Remote Controller	Yes	
	Body	Size	111.5(W) * 83.5(D) * 69(H) cm
			43.89(W) * 32.87(D) * 27.16(H) inch
		Weight	28.5Kg/62.7 pounds(gross)
	Stand	Size	72(W) * 32.5(D) * 28.5(H) cm
			28.34(W) * 12.79(D) * 11.22(H) inch
		Weight	5.9Kg/12.98pounds(gross)
	Dimension	108.6(W) * 30.4(D) * 64(H)cm : Speaker(stand include)	
		42.74(W) * 11.96(D) * 25.19(H) inch	

Specification are subject to changes without prior notice.

CHASSIS OVERVIEW

ITEMS		SPECIFICATION
Display	Target Panel Size	LCD 37/42 inch
	Aspect Ratio	16:9
	Resolution	WXGA (1280X768, 1366X768)
	Refresh Rate	50Hz, 60Hz
	Maximum Pixel Rate	Supports dual link up to 135MHz dot clock for SXGA
	Interface	Single or Dual Channel LVDS
Supported Signals	Analog PC	H Frequency Range : 20 ~ 82 kHz
		V Frequency Range : 55 ~ 90 kHz
		Maximum resolution : 1600 x 1200 60Hz
		Maximum pixel rate : 165 MHz
		DTV mode support : 720p/1080i
		Separate / SOG sync support
	Digital PC (DE Mode)	H Frequency Range : 20 ~ 82 kHz
		V Frequency Range : 55 ~ 75 kHz
		Maximum resolution : 1600 x 1200 60Hz
		Maximum pixel rate : 165 MHz
		DTV mode support : 720p/1080i
	CVBS, S-Video	NTSC-M, PAL-BGHI, NTSC-4.43, SECAM, PAL-60
	Component	1080i, 720p, 480i/576i, 480p/576p
	TV	All PAL/SECAM System
Connection (Video)	TV	Ant in (75 ohms coaxial cable)
	SCART	SCART in (75 ohms 0.7/1.0 Vp-p) CVBS
	AV1	AV1 in (75 ohms 0.7/1.0 Vp-p) CVBS
	AV2	AV2 in (75 ohms 0.7/1.0 Vp-p) CVBS
	S-Video	S-Video in
	Component	Y-Pb-Pr DTV RCA in (75 ohms 0.7Vp-p)
	PC Analog	D-sub in (Analog : 75 ohms±10%, 0.7Vp-p±5%)
	HDMI	HDMI Type (Support HDMI ver 1.0)
Connection (Audio)	TV	Tuner SIF in

	SCART	SCART Stereo Sound in (500mVrms)
	AV1	AV1 Stereo Sound in (500mVrms)
	AV2	AV2 Stereo Sound in (500mVrms)
	PC	Stereo Audio Line in (500mVrms)
	S-Video	RCA Stereo Audio Line in (500mVrms) – Shared
	Component 1	RCA Stereo Audio Line in (500mVrms) – Shared
	Speaker Out	7W x 2 Stereo Speaker (8 ohms)
TV	Audio Out	RCA Stereo Audio Line Out (500mVrms)
	Digital Audio Out	HDMI SPDIF Audio (Optical)
	Tuning System	PAL/SECAM System
	Tuning Range	48.25MHz ~ 863.25MHz
	No of Programs	100 Channels
	Sound System	BG, DK, I, L, L
	MTS Support	Mono/Stereo/Nicam/Bi–Lingual
OSD	Color	8 Bit color (256 color palette from 565 16 bit color)
	OSD Type	Graphic & text
	Language Support	Unicode string format
		(later) All language support
		(later) Supports Arabic reversed string order
User Functions	Image Adjustment	Contrast / Brightness / Sharpness / Color / Tint
		Color Temperature
		Picture Standard Select
		Image aspect ratio
	TV Function	Country Option Select
		Auto Frequency Scan
		Manual Channel Edit –Color System –Sound System –Channel Edit –Manual Frequency Search
		Channel Add/Erase
		Channel Name Edit

		Channel Sort
		Manual Fine Tune
	Sound Function	Volume
		Balance
		5 Band Equalizer
		Mono / Stereo / Nicam Dual / Nicam Sound
		Sound Standard Select
	PC Function	Auto Adjustment
		Frequency Adjustment
		Phase Adjustment
		H/V Position Adjustment
		Up to 32 analog pc mode memorize
	PIP Function	PIP On/Off
		PIP Source Select
		PIP Size
		PIP Position
		PIP Swap
		PIP Sound Select
	TTX	252 Pages
	Timer	Sleep Time Select
		Current / On / Off Time Adjustment
		On Time Channel / Volume
	Miscellaneous	User Default Reset
		OSD Language Select
		Blue Screen
Power	Back Light Power	Panel Dependent
	Standby Power	DC 5V / 1.5A
	Board/Panel Power	DC 12V or 5V (depend on Panel)
	Power Save Mode	Under 5W

KEY COMPONENT

Chip Model	Key Components	Maker	Comments
MST5151A	SCALER, ADC, DVI(HDCP), LVDS	MStar	
VCT49XYI	AV, IF, TTX	Micronas	
TA2024	Audio AMP	Tripath	
HY5DU281622ET	DDR	Hynix	
MX29LV8000BTTC-70	Flash	Mx	
IC62LV2568LL	SRAM	CSI	
TEA6422	Audio Mux	ST	
WT61P4	Expand I/O	Weltrend	
TS5V330DBQR	Component Mux	Pericom	DTT Option
74CBTLV3257	UART Input Mux		DTT Option
AK4386	DAC		HDMI Option

SERVICE MODE

Press Still -> Sleep -> Mute -> Enter in the order from the remote controller to enter the service (factory) mode.

SERVICE MENU	Sub menu	Initial	Remarks
1. Calibration	PC calibration		Auto Color Gain adjustment: PC and DTV mode
2. Option Table	Last Power	On	On <-> Off
	Melody Volume	10	0 ~ 20
	Logo	Off	On <-> Off
3. Color Control	Sub-Brightness	128	0 ~255
	Red Offset	128	0 ~255
	Green Offset	128	0 ~255
	Blue Offset	128	0 ~255
	Sub-Contrast	128	0 ~255
	Red Gain	128	0 ~255
	Green Gain	128	0 ~255
	Blue Gain	128	0 ~255
4. Device Adjustment	MST5151A		
	MST5151A Memory		
	MST5151A Option		
	ADC		
	VCT		
5. Heat Run	MST5151A Pattern		Stop – Power off (Tact switch)
	VCT49xyl Pattern		
	Full White		

6. Version	Version		Saturn VCT-PAL
	Release		Firmware Version
	Panel used time		Show panel used time
	TTX252PAGE		
7. Reset	Reset		Initialize to factory mode

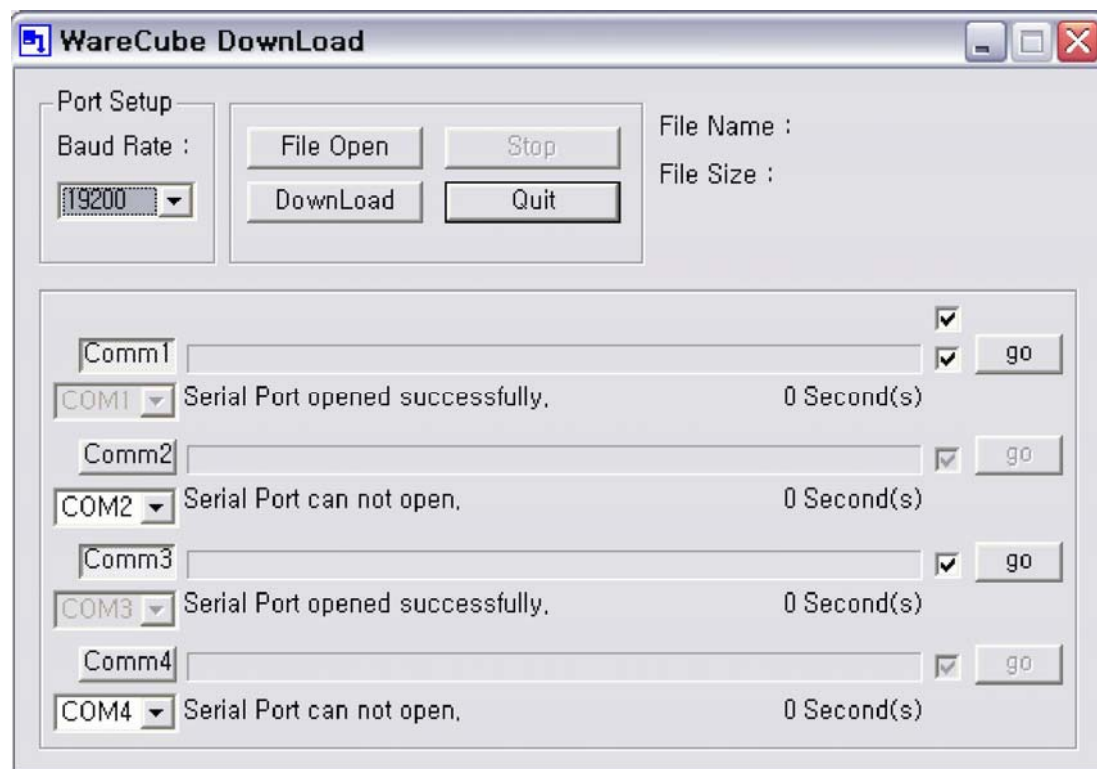
FIRMWARE UPDATE

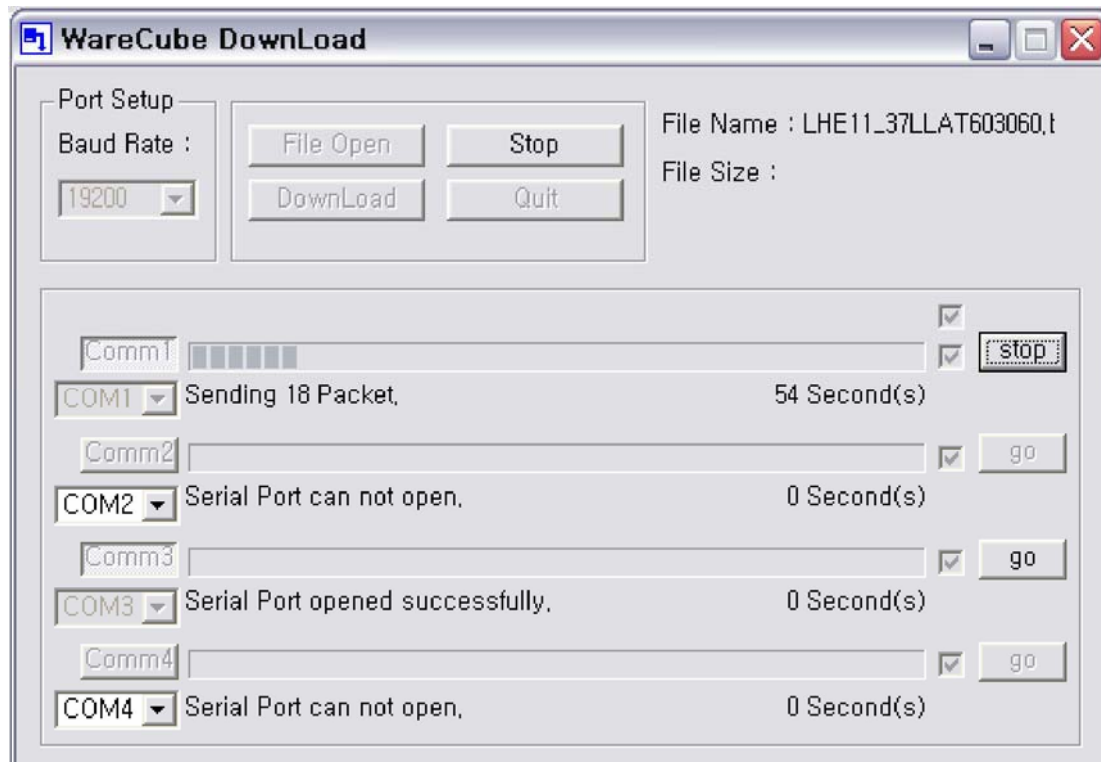
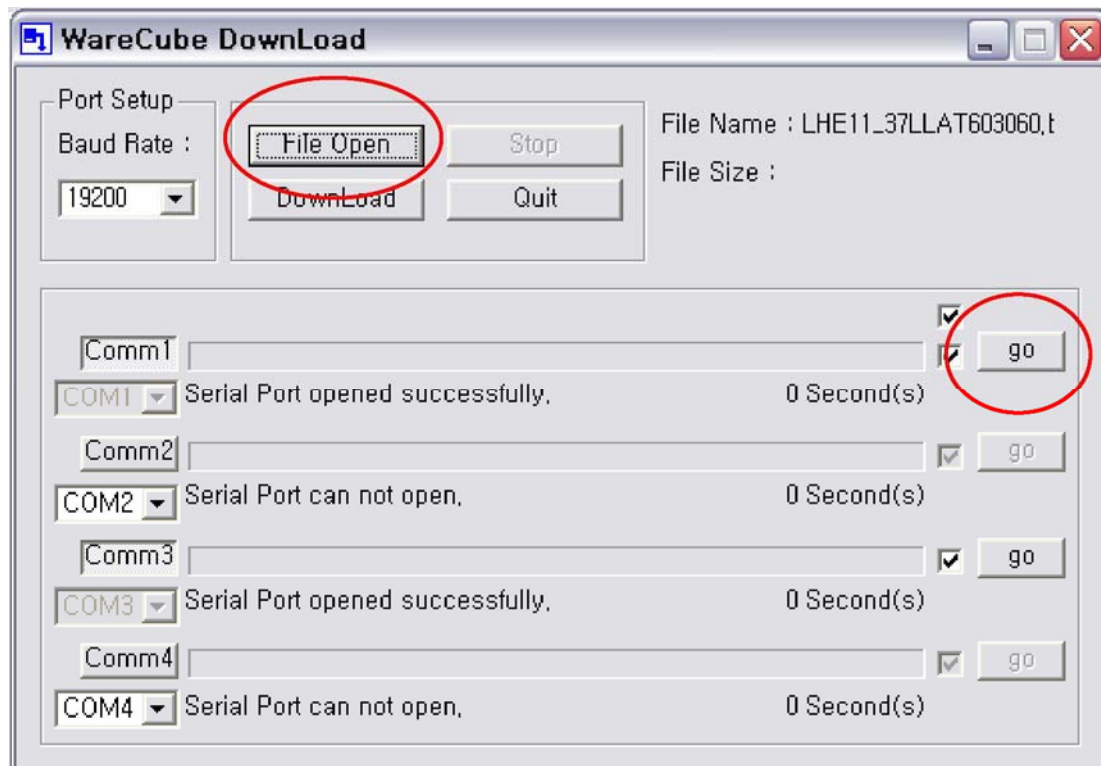
(1) With the TV power turned off with the master switch, connect the RS232C to the firmware update cable and open the executable file of the program (WareCubeDownload.exe).

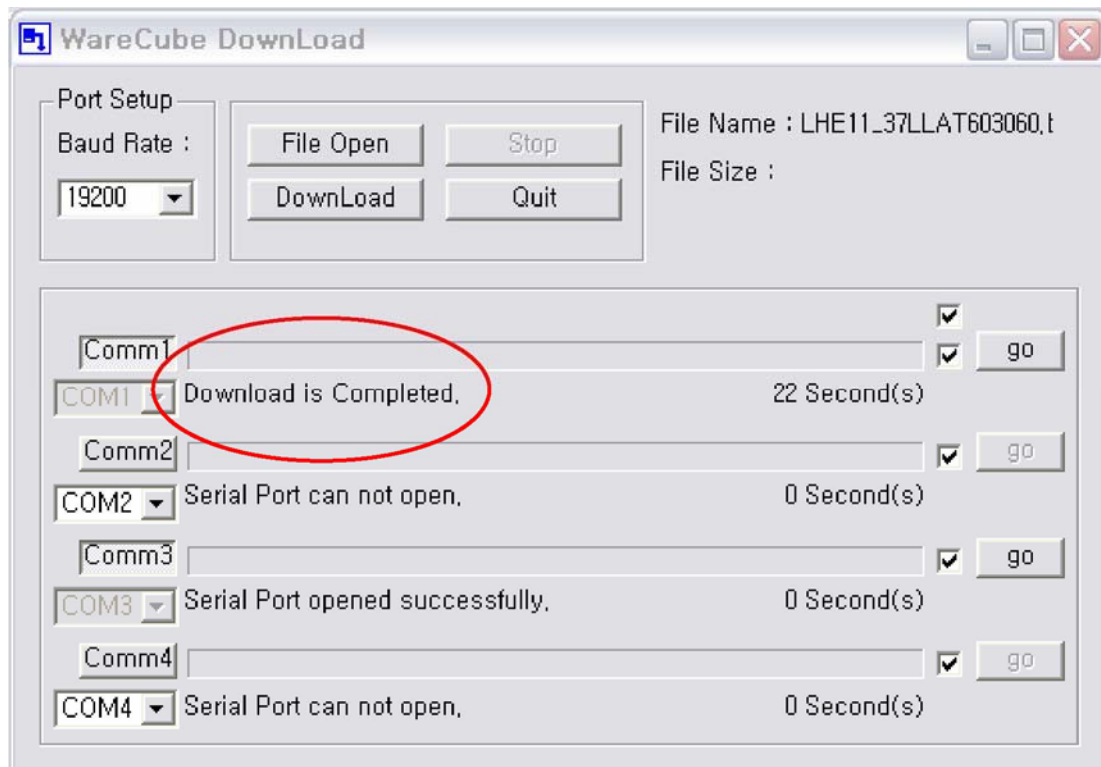
(2) Click on "File Open" to select Update File. Click on "Go" and it will be in standby condition for firmware update.

(3) Turn the power of the TV on with the master switch to start the firmware update.

(4) When the firmware update is complete, you will see a message saying "Download is Completed.". When completed, turn the power of the TV Off/On with the master switch.

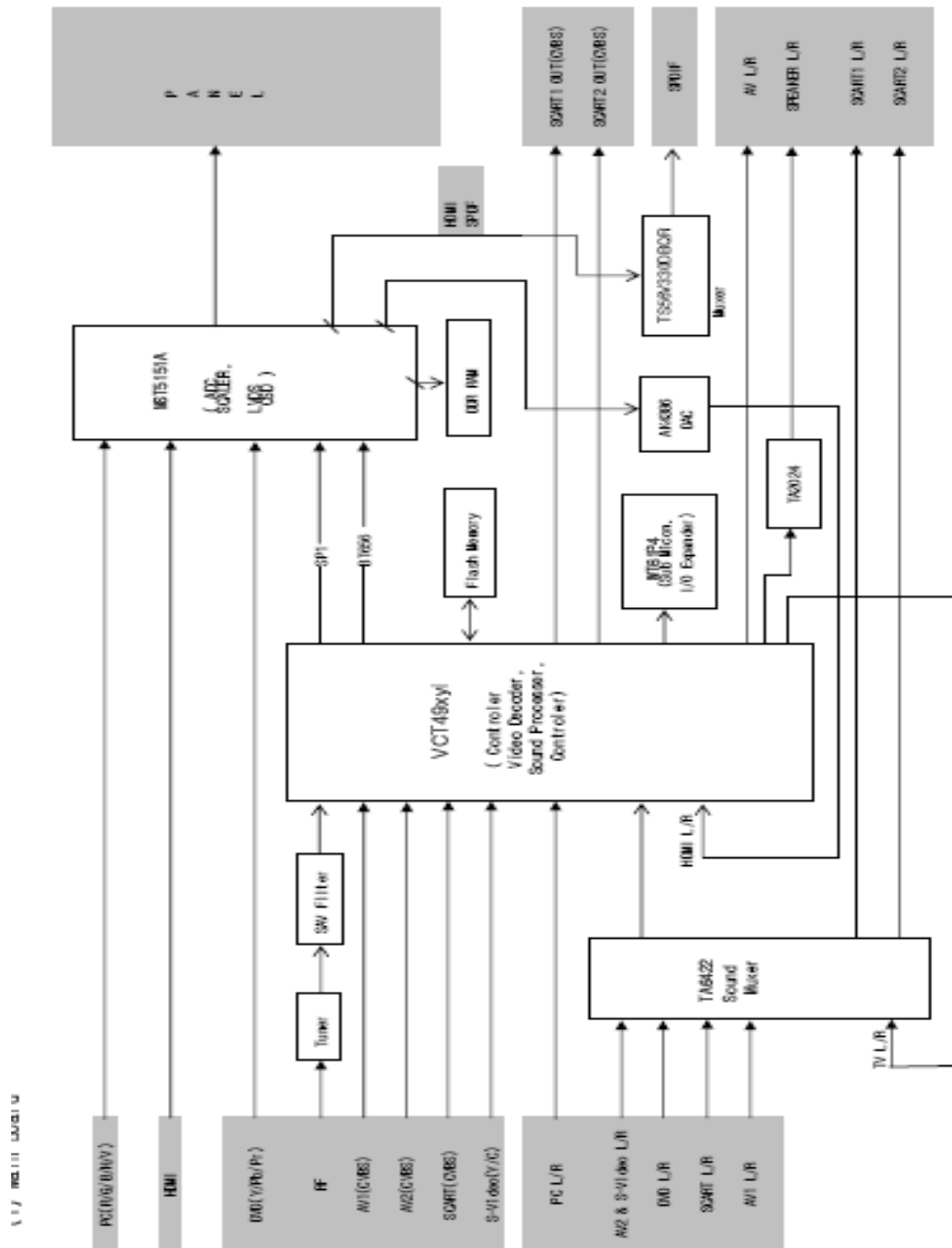




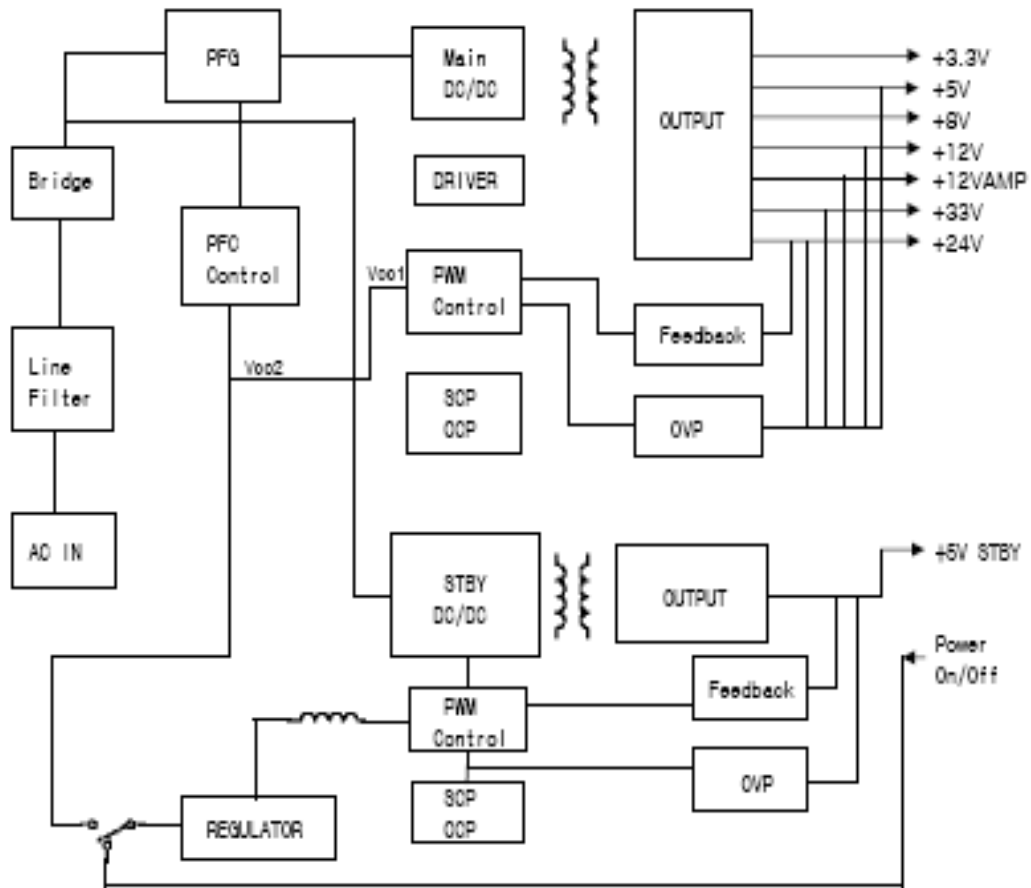


BLOCK DIAGRAM

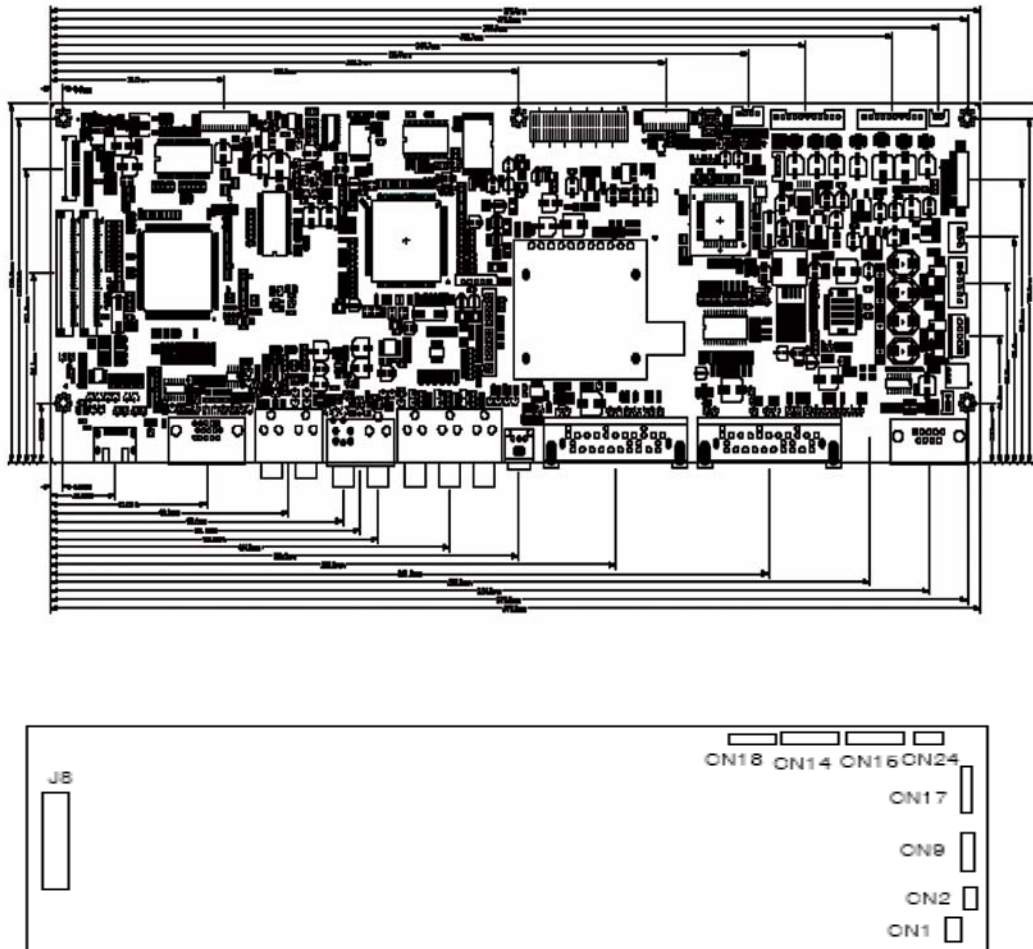
Main Board



POWER BOARD



PCB LAYOUT



1. JB : LVDS Signal
2. CN18 : To Power Board
3. CN14 : Main Power
4. CN15 : Sub Power
5. CN24 : N.C
6. CN17 : Key Pad
7. CN9 : Speaker
8. CN2 : To PC
9. CN1 : To Module

INPUT LAYOUT



1 HDMI

Connects the HDMI cable to the HDMI connector on the computer.
(or DVD player, Set-top Box etc)

2 ANALOG RGB

Connects the VGA signal cable to the VGA connector on the computer.

3 AUDIO OUT

Jack for connecting on Audio AMP.

4 PC AUDIO IN

Connect to the audio-output port of a PC.

5 S-VIDEO IN

Input the S-VIDEO signal from an S-VHS VCR or Laserdisc player.

6 AV2 : COMPOSITE VIDEO IN/AUDIO IN(Left/Right)

COMPOSITE VIDEO IN : Connects with the VIDEO input terminal from a VCR.(or DVD Player)
AUDIO L/R IN : Connects with the Audio Left/Right from a VCR. (or DVD Player)

7 COMPONENT VIDEO IN

Jack for connecting the DVD player (or VCR player or Digital TV playback player)
video input connector (for both DVD and DTV).

8 OPTICAL OUT

Digital Audio out

9 COMPONENT AUDIO IN

Connects with the Audio-Left/Right from an S-VHS VCR. (or DVD Player)

10 SCART (Half)

Connects PAL-method TV Audio/Video.

11 AV1 : COMPOSITE VIDEO IN/AUDIO IN (Left/Right)

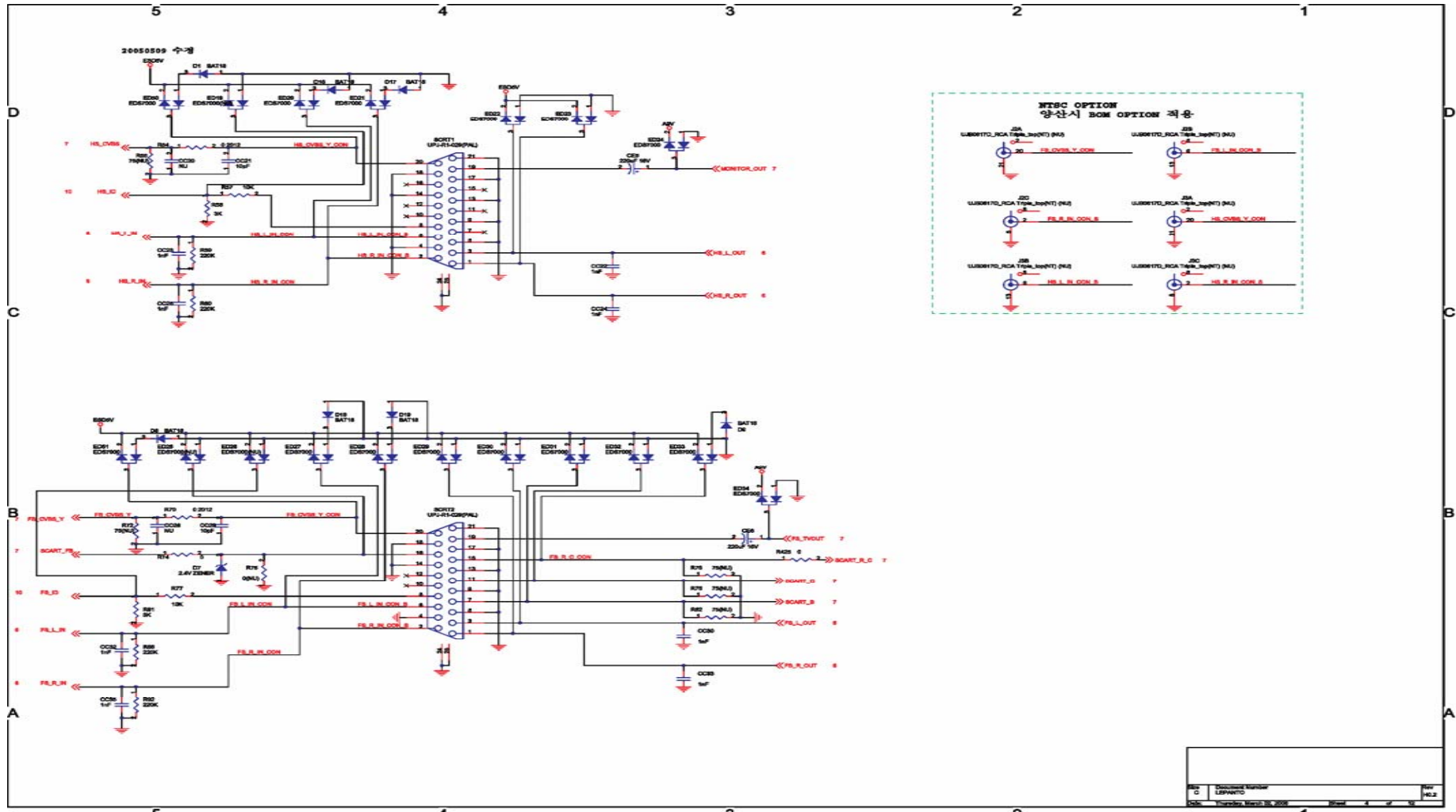
12 COMPOSITE VIDEO IN : Connects with the Video input terminal from a VCR.(or DVD Player)

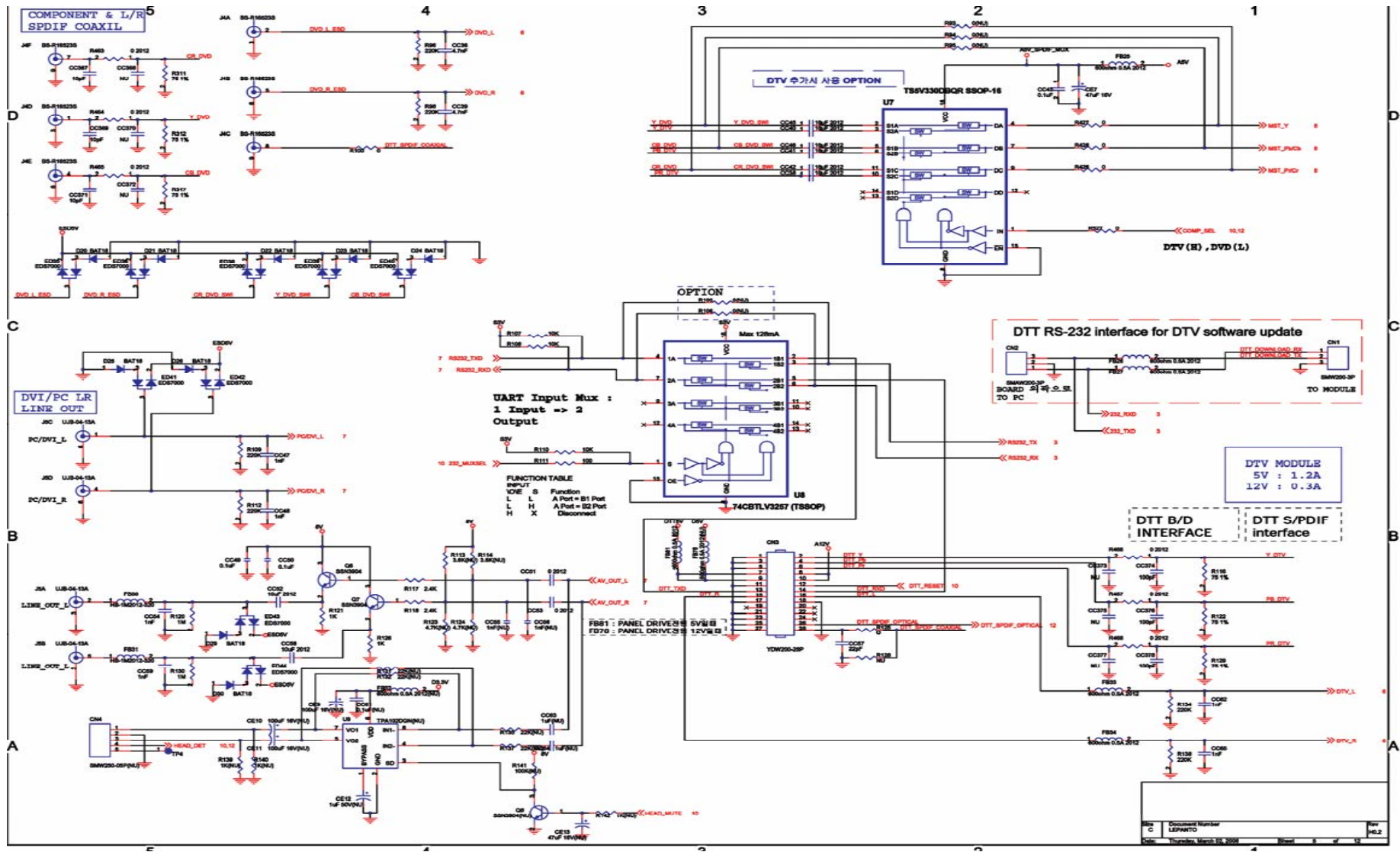
AUDIO L/R IN : Connects with the Audio Left/Right from a VCR. (or DVD Player)

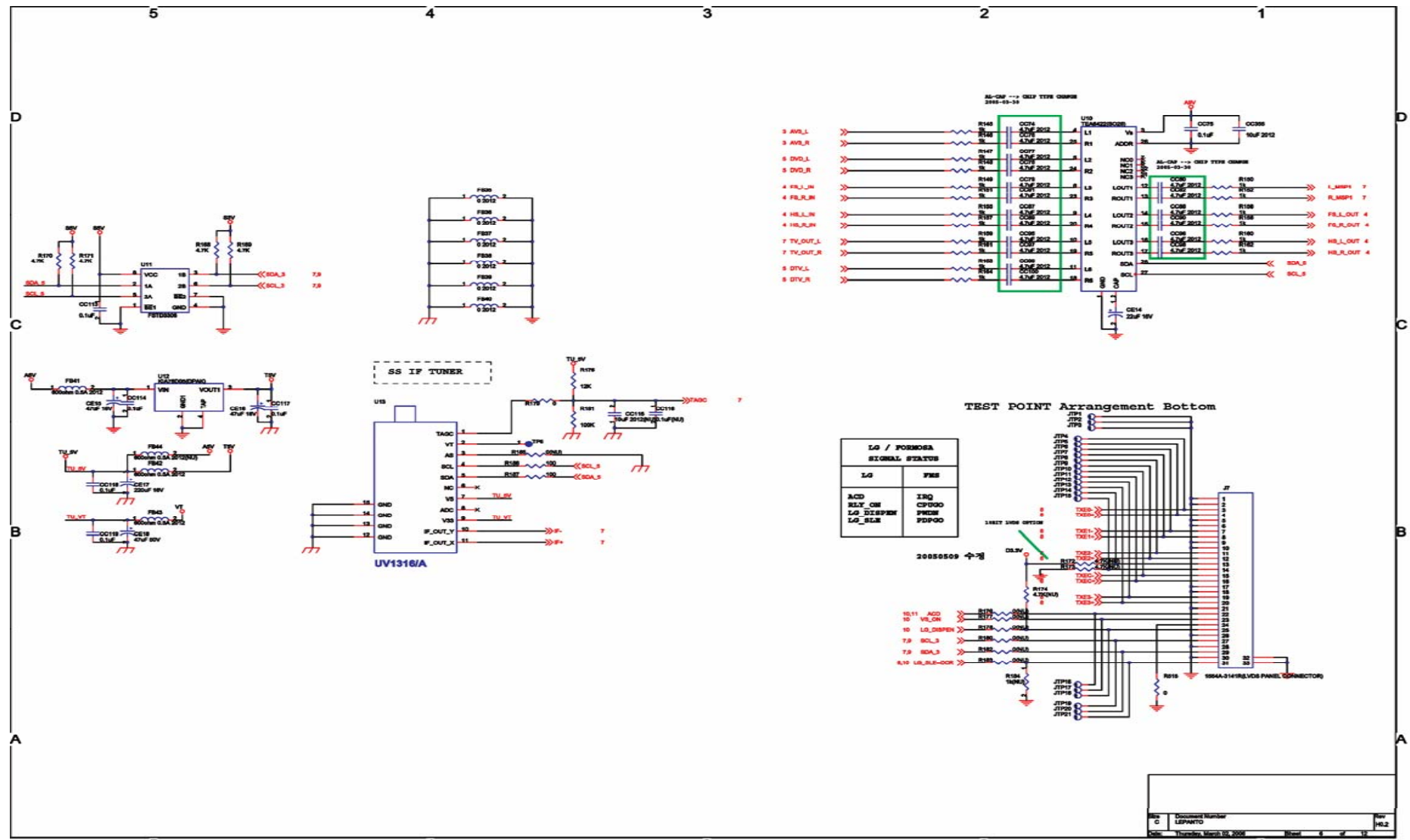
13 ANT (VHF/UHF) Connector

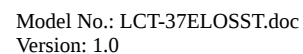
Connect with an external cable from the external antenna.

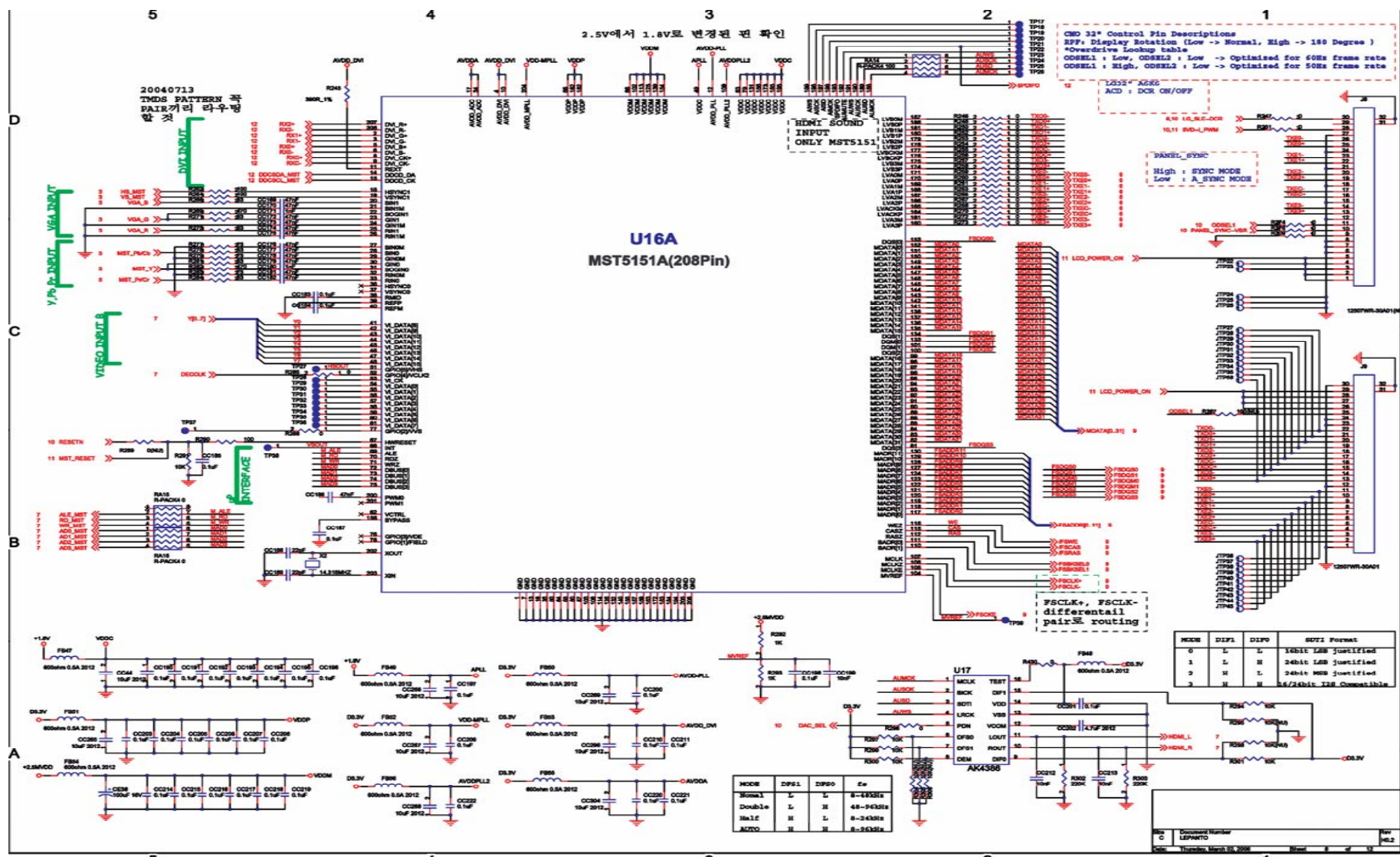
CIRCUIT DIAGRAM

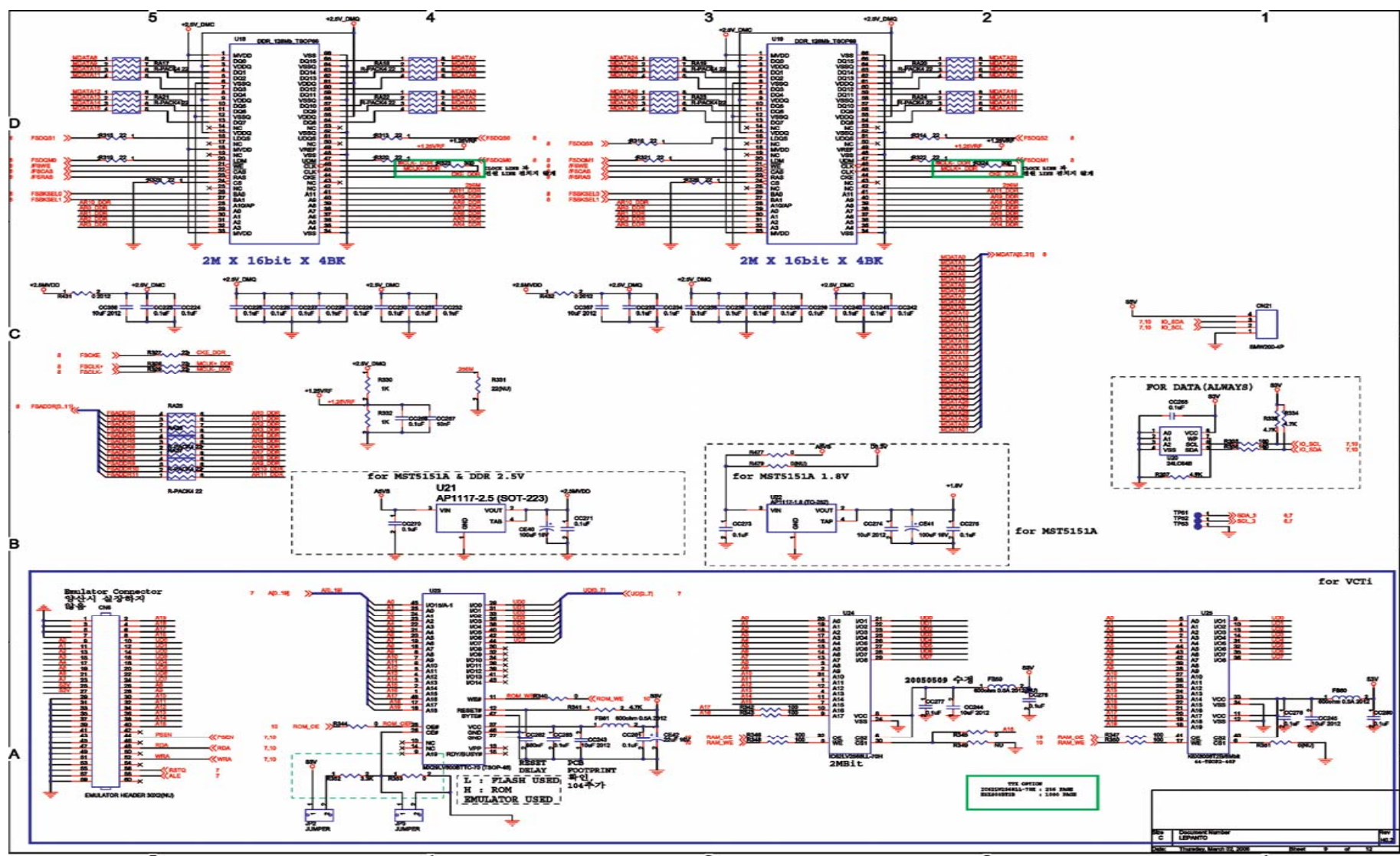


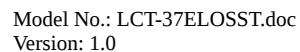


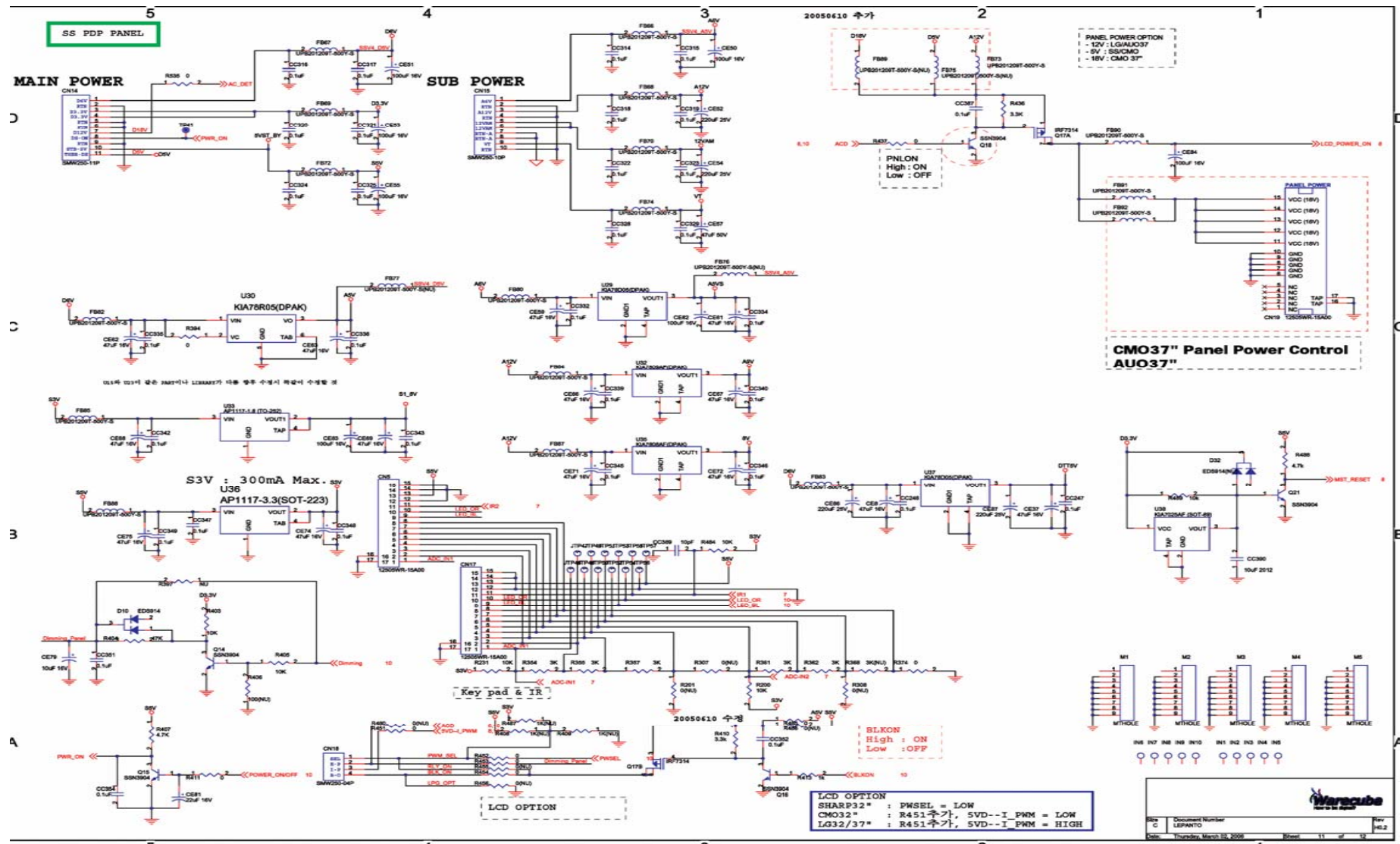


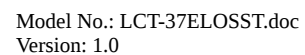












OSD MANUAL STRUCTURE

Level 1	Level 2	Level 3	Lever 4	Description	Min	Max	Step	Default
Picture(Video)	Picture Mode			Select Picture Standard	Custom Dynamic Standard Movie Mild		1	Standard
	Custom	Brightness	Dir_Birghtness	Adjust brightness of image	0	100	1	50
		Contrast	Dir_Contrast	Adjust contrast of image	0	100	1	50
		Color	Dir_Color	Adjust color saturation of image	0	100	1	50
		Tint	Dir_Tint	Adjust tint angle of image	0	100	1	50
		Sharpness	Dir_Sharpness	Adjust sharpness of image	0	100	5	50
		Phase	Dir_Fine	Adjust phase(fine) of image	0	100	100/32	50
	Color Tone			Select color temperature	Cool 2 Cool 1 Normal Warm1 Warm 2			Normal

	Size			Adjust screen aspect ratio	Auto-wide Wide Panorama Zoom			Auto-wide
Picture (Video)	Size			Adjust screen aspect ration	4:3 14:9			Auto-wide
Picture(PC)	Picture mode			Select picture standard	Custom High Middle Low		1	Middle
	Custom	Brightness	Dir_Brightness	Adjust brightness of image	0	100	1	50
		Contrast	Dir_Contrast	Adjust contrast of image	0	100	1	50
		Sharpness	Dir_Sharpness	Adjust sharpness of image	0	100	5	50
	Color Tone	Color Tone		Select color temperature	Custom Cool2 Cool1 Normal Worm1 Worm2			Custom
		RED	Dir_RED	Adjust contrast of red color	0	100	1	50
		GREEN	Dir_GREEN	Adjust contrast of green color	0	100	1	50
		BLUE	Dir_BLUE	Adjust contrast of blue color	0	1010	1	50

	Size			Adjust screen aspect ratio	Wide 4:3			Wide
	PC (Image lock)	Auto in Progress		Execute auto image adjustment	EXE_Auto			
		Phase		Adjust phase of PC image	0	100	100/64	
		H-Position		Adjust horizontal position	0	100		
		V-Position		Adjust vertical position	0	100		
		Frequency		Adjust sampling clock frequency	0	100		
Sound	Mode			Select sound standard	Custom Standard Music Movie Speech		1	Custom
	Volume			Adjust sound volume	0	100	1	20
	Balance			Adjust sound balance	L50	R50	1	0
	Equalizer	10kHz		Adjust volume of 10kHz band	0	100	5	60
		3kHz		Adjust volume of 3kHz band	0	100	5	50
		1kHz		Adjust volume of 1kHz band	0	100	5	45

		300kHz		Adjust volume of 300kHz band	0	100	5	50
		100kHz		Adjust volume of 100kHz band	0	100	5	60
	Auto Volume			Auto volume level On/Off	Off On		1	On
	Sound Mode			Select MTS according to sound format	Mono Stereo Dual I Dual II Nicom Mono Nicom Stereo Nicom Dual I Nicom Dual II			
	DTV Sound Select			Select SPDIF/Analog sound of DTV	Digital Analog			Analog

	Country			Set up country for TV tuning	Austria Belgium Croatia Denmark Finland France Deutschland Iceland Ireland Italia Netherlands Norway			
					Poland Spain Sverige Schweiz East Europe UK Others			
	Auto Store			Execute auto program searching				
		Prog		Select program channel	0	99	1	1
					Auto			

	Manual Store	Color System		Select color system in current program	PAL SECAM NT4.43			
		Sound System		Select sound system in current program	BG DK I L			
		Channel	Real Channel	Select cable/broadcast channel	C S			
			Real Channel Number	Select channel number	0			
		Search	Frequency	Execute frequency up/down searching				
		Store		Store channel setting to current program	Yes No			
	Add/Delete			Add/Erase selected channel	Add/Erase			
	Sort			Sort selected channel				
	Name			Edit name of selected channel				
	Fine Tune	DIR fine tune		Adjust fine tune of current program	-32	32	1	0

Setup	Reset			Reset user setting to default	EXE_Reset			
	Time	Clock	Hour	Adjust hours of current time	0	23	1	
			Minute	Adjust minutes of current time	0	59	1	
		On Time	Hour	Adjust hours of on time	0	23	1	0
			Minute	Adjust minutes of on time	0	59	1	0
			Off/On	Enable/Disable on time	Off / On		1	Off
		Off Time	Hour	Adjust hours of off time	0	23	1	0
			Minute	Adjust minutes of off time	0	59	1	0
			Off/On	Enable/Disable off time	Off / On		1	Off
		On Time Channel		Select program when TV is on by on time	0	99	1	1
		On Time Volume		Adjust volume when TV is on by on time	0	100	1	20
					English			

				Select language of OSD	German French Spanish Italian		1	English
				Enable/Disable				
	OSD Tone				On/Off		1	On
				OSD background blending				
	Blue			Select blue/black screen for				
					On/Off		1	Off
	Screen			Blanking screen				
					Off			
	Setup	OSD Language		Enable/Disable PIP			1	Off

PIP	Input Source				On			
		Input Source		Select PIP source	TV Scart AV1 AV2 S-Video Component PC HDMI			
		Size		Adjust PIP screen size	Large Double1 Double2		1	Large

	Position	Position		Select PIP position			1	Large
		Swap		Swap main screen for PIP screen	Right Bottom Right Top Left Top Left Bottom		1	Right Buttom
	Sound			Select main or PIP sound input source	Main Sub			Main

B.O.M - Main

No	L	Parts Code	Part Name	Q'ty	Reference
1		Main Board Ass'y			LHP11-37LLAT-M10D2
1	2	CNJ05150	D-SUB 15PIN FEMAIL	1	DSUB2
2	2	CNJ13211	SCART 21P(SCREW)	1	SCRT1
3	2	CNJ02067	RCA3X2(6P) Ni WR/GB	1	J4
4	2	CNJ02040	RCA2X2 Ni WW/RR	1	J5
5	2	CNJ09010	CXPTIC JACK	1	J6
6	2	CNJ04030	DIN Y/W/S-VIDEO/R	1	J1
7	2	CNW04321	4P 2.50 DIP_ST	1	CN18
8	2	CNW06320	6P 2.50 DIP_ST	1	CN9
9	2	CNW10321	10P 2.50 DIP_ST	1	CN15
10	2	CNW11321	11P 2.50 DIP_ST	1	CN14
11	2	CNW04220	4P 2.00 DIP_ST	1	CN21
12	2	CCS12301	TACT SW DIP_ST	1	SW01
13	2	CC05012	SAW FILTER PAL	1	U14
14	2	CCP10140	Separate (paper) 490X127 2th	0.6	
15	2	CCP20140	Separate (paper) 410X127 2th	0.2	
16	2	CCP50110	PAD 480X410	0.15	
17	2	CCP30110	BOX 490X420X290	0.06	
18	2	COP40120	BUBBLE BAG	1	
19	2	COT20130	TU PAL(IF_A)	1	U13
20	2	CNJ02035	RCA 3X1 Ni RWY(SCART)	1	J2
21	2	ASS'Y CODE			LHP11-37LLAT-M1002T
1	3	CCC10000	CC 1506 50V 10pJ	13	CC7,CC21,CC25,CC29,CC361,CC363,CC365,CC367,CC369,CC371,CC382,CC384,CC389
2	3	CCC22000	CC 1506 50V 22pJ	7	CC57,CC133,CC134,CC188,CC189,CC311,CC312
3	3	CCC47000	CC 1608 50V 47pJ	3	CC16,CC123,CC248
4	3	CCC10100	CC1608 50V 100pJ	2	CC121,CC122
5	3	CCC47100	CC1608 50V 470pJ	12	CC146,CC148,CC150,CC152,CC154,CC156,CC158,CC160,CC162,CC164,CC166,CC158
6	3	CCC68100	CC 1608 50V 680pJ	1	CC18

7	3	CCC10210	CC 1608 50V 1nK	20	CC8,CC9,CC22,CC23,CC24,CC25,CC30,CC32,CC33,CC35,CC47,CC48,CC54,CC59,CC171,CC180,CC294,CC295,CC302,CC303
8	3	CCC15210	CC 1608 50V 1.5nK	12	CC145,CC147,CC149,CC151,CC153,CC155,CC157,CC159,CC161,CC163,CC165,CC167
9	3	CCC22210	CC 1608 50V 2.2nK	2	CC250,CC251
10	3	CCC47210	CC 1608 50V 4.7nK	2	CC35,CC39
11	3	CCC10310	CC 1608 50V 10nK	4	CC199,CC212,CC213,CC257
12	3	CCC47320	CC 1608 25V 47nK	13	CC169,CC170,CC172,CC173,CC174,CC175,CC176,CC177,CC178,CC179,CC181,CC182,CC186
13	3	CCC10440	CC 1608 50V 100n Z	133	CC12,CC13,CC14,CC15,CC27,CC43,CC49,CC50,CC60,CC75,CC113,CC114,CC117,CC118,CC119,CC120,CC124,CC131,CC132,CC183,CC184,CC185,CC187,CC190,CC191,CC192,CC193,CC194,CC195,CC196,CC197,CC198,CC200,CC201,CC203,CC204,CC205,CC206,CC207,CC208,CC209,CC210,CC211,CC214,CC215,CC216,CC217,CC218,CC219,CC220,CC221,CC222,CC223,CC224,CC225,CC226,CC227,CC228,CC229,CC230,CC231,CC232,CC233,CC234,CC235,CC236,CC237,CC238,CC239,CC240,CC241,CC242,CC246,CC247,CC255,CC256,CC270,CC271,CC273,CC275,CC276,CC277,CC278,CC280,CC281,CC283,CC284,CC285,CC286,CC289,CC290,CC291,CC293,CC299,CC300,CC305,CC307,CC309,CC313,CC314,CC315,CC316,CC317,CC318,CC319,CC320,CC321,CC322,CC323,CC324,CC325,CC328,CC329,CC332,CC334,CC335,CC336,CC339,CC340,CC342,CC343,CC345,CC346,CC347,CC348,CC349,CC351,CC352,CC354,CC387,CC393,CC394,CC395
14	3	CCC22450	CC 1608 25V 220n Z	11	CC135,CC136,CC137,CC141,CC287,CC288,CC292,CC297,CC298,CC301,CC379
15	3	CCC33460	CC 1608 16V 330n Z	6	CC125,CC126,CC127,CC128,CC129,CC130
16	3	CCC68470	CC 1608 10V 680n Z	6	CC138,CC140,CC142,CC144,CC282,CC380
17	3	CCC10570	CC 1608 10V 1u Z	6	CC1,CC2,CC3,CC4,CC5,CC386,
18	3	CCC47511	CC2012 10V 4.7u Z	19	CC74,CC75,CC77,CC78,CC79,CC80,CC81,CC82,CC87,CC88,CC89,CC90,CC95,CC96,CC97,CC98,CC99,CC100,CC202
19	3	CCC10611	CC 2012 10V 10u Z	25	CC44,CC52,CC58,CC243,CC244,CC245,CC265,CC266,CC267,CC268,CC269,CC274,CC295,CC304,CC306,CC308,CC310,CC355,CC356,CC357,CC359,CC360,CC388,CC390,CC391,CC392
20	3	CCCE33130	CE 4X5.3 50V 0.33u	2	CE45,CE46
21	3	CCCE10230	CE 4X5.2 50V 1u	1	CE44
22	3	CCCE33230	CE 4X5.3 50V 3.3u	1	CE19

23	3	CCE47230	CE 4X5.3 50V 4.7u	1	CE21
24	3	CCE10300	CE 4X5.3 16V 10u	1	CE70
25	3	CCE22300	CE 4X5.3 16V 22u	15	CE14,CE24,CE25,CE26,CE27,CE28,CE29,CE30, CE31,CE32,CE33,CE34,CE35,CE42,CE81,
26	3	CCE47300	CE 5X5.3 16V 47u	16	CE7,CE15,CE16,CE49,CE59,CE61,CE62,CE63, CE66,CE67,CE68,CE69,CE71,CE72,CE74,CE75,
27	3	CCE47330	CE 6.3X7.7 50V 47u	2	CE18,CE57
28	3	CCE10400	CE 6.3X5.3 16V 100u	13	CE1,CE22,CE23,CE38,CE40,CE41,CE50,CE51, CE53,CE55,CE82,CE83,CE84
29	3	CCE22410	CE 8X10.5 25V 220u	8	CE5,CE6,CE17,CE43,CE47,CE52,CE54,CE85
30	3	CDD30350	SW DIODE 100mA 35V	22	D1,D8,D9,D11,D12,D13,D14,D15,D16,D17,D18, D19,D20,D21,D22,D23,D24,D25,D26,D28,D29,D30
31	3	CDD30851	SW DIODE 300mA 85V	42	ED11,ED12,ED13,ED20,ED21,ED22,ED23,ED24,ED27, ED28,ED29,ED30,ED31,ED32,ED33,ED34,ED35,ED36, ED38,ED39,ED40,ED41,ED42,ED43,ED44,ED45,ED46, ED47,ED48,ED49,ED50,ED51,ED53,ED54,ED55,ED56, ED57,ED58,ED59,ED60,ED61,ED62,
32	3	CDD30850	SW DIODE 300mA 85V	4	D4,D5,D6,D10,
33	3	CDD30700	SW DIODE 70V 450mA	1	D33
34	3	CDD12940	ZENER 200mW 2.4V	1	D7
35	3	CDD20300	SCHDTTKY 1A 30V	4	SD1,SD2,SD3,SD4
36	3	CBD20600	FER-BEAD 600 Ω 2012	21	FB1,FB2,FB4,FB5,FB25,FB41,FB42,FB43,FB47, FB48,FB49,FB50,FB51,FB52,FB53,FB54,FB55 FB56,FB59,FB61,FB71
37	3	CBD20320	FER-BEAD 32 Ω 2012	2	FB30,FB31
38	3	CBD20050	FER-BEAD 50 Ω 2012	16	FB66,FB67,FB68,FB69,FB70,FB72,FB73,FB74, FB80,FB82,FB84,FB85,FB87,FB88,FB90,FB93
39	3	CLI10100	F.IND 3225 10U $\pm$ 10%	12	L16,L17,L18,L19,L20,L21,L22,L23,L24,L25, L26,L27
40	3	CLI32940	P.IND 0804 2.4A 10U	4	L28,L29,L30,L31
41	3	CTR20100	T3904 NPN SOT-23	11	Q1,Q5,Q7,Q9,Q10,Q14,Q15,Q16,Q18,Q20,Q21
42	3	CTR10100	T3906 PNP SOT-23	2	Q11,Q12
43	3	CTR20140	MOSFET 0.0680 SD-8	1	Q17
44	3	CRA00010	RA 1608 0 1/10J	9	RA3,RA4,RA5,RA6,RA7,RA8,RA9,RA15,RA16
45	3	CRA22010	RA 1608 22 1/10J	11	RA17,RA18,RA19,RA20,RA21,RA22,RA23,RA24,RA25, RA26,RA27

46	3	CRA10110	RA 1608 100 1/10J	8	RA2,RA11,RA14,RA28,RA29,RA30,RA31,RA32,
47	3	CRA10210	RA 1608 1K 1/10J	2	RA1,RA13
48	3	CRC00010	RC 1608 0 1/10J	83	R3,R8,R30,R45,R74,R83,R84,R90,R100,R105, R106,R125,R179,R194,R197,R202,R203,R204,R205, R206,R234,R246,R247,R248,R250,R251,R252,R253, R254,R255,R256,R257,R258,R259,R260,R261,R263, R265,R267,R268,R270,R272,R273,R274,R276,R285, R288,R296,R309,R340,R344,R345,R353,R372,R374, R377,R379,R392,R393,R394,R411,R423,R424,R425, R430,R434,R437,R451,R452,R453,R454,R471,R473, R474,R477,R485,R494,R495,R498,R499,R514,
49	3	CRC00030	RC 2012 0 1/8J	21	FB39,FB40,CC51,CC53,R54, FB62,FB63,FB64, FB65, R70,R431,R432,R460,R461,R462,R463, R464,R465,R469,R470,R516,
50	3	CRC30030	RC 1608 3.3 1/10J	2	R510,R511
51	3	CRC40070	RC 1608 4.7 1/10J	6	R501,R502,R504,R505,R507,R508
52	3	CRC10010	RC 1608 10 1/10J	1	R529
53	3	CRC10091	RC 5025 10 1/2J	2	R356,R365
54	3	CRC22010	RC 1608 22 1/10J	13	R313,R314,R315,R316,R319,R320,R321,R322, R325,R326,R327,R328,R329
55	3	CRC33010	RC 1608 33 1/10J	6	R266,R271,R275,R278,R281,R284
56	3	CRC75010	RC 1608 75 1/10J	15	R56,R73,R212,R213,R214,R215,R216,R218, R219,R220,R222,R227,R277,R279,R283
57	3	CRC75020	RC 1608 75 1/10F	6	R41,R43,R49,R311,R312,R317
58	3	CRC10110	RC 1608 100 1/10J	41	R25,R42,R50,R111,R186,R187,R188,R189, R190,R191,R192,R193,R195,R209,R210,R225 R226,R228,R229,R230,R232,R262,R264,R290, R335,R336,R342,R343,R346,R347,R348,R350, R366,R381,R383,R384,R385,R389,R390,R391, R422
59	3	CRC15110	RC 1608 150 1/10J	4	R238,R240,R243,R244
60	3	CRC20110	RC 1608 200 1/10J	1	R490
61	3	CRC30110	RC 1608 300 1/10J	5	R206,R323,R324,R482,R483
62	3	CRC39120	RC 1608 390 1/10F	1	R245
63	3	CRC47110	RC 1608 470 1/10J	6	R45,R52,R99,R101,R269,R282
64	3	CRC10210	RC 1608 1K 1/10J	36	R9,R44,R51,R121,R126,R145,R146,R147,R148,R149, R150,R151,R152,R155,R156,R157,R158,R159,R160, R161,R162,R163,R164,R199,R292,R293,R330,R332, R385,R387,R388,R413,R496,R528,R530,R531
65	3	CRC24210	RC 1608 2.4K 1/10J	3	R46,R117,R118

66	3	CRC30210	RC 1608 3K 1/10J	7	R58,R81,R354,R356,R357,R361,R362
67	3	CRC33210	RC 1608 3.3K 1/10J	3	R352,R410,R436
68	3	CRC47210	RC 1608 4.7K 1/10J	14	R29,R30,R168,R169,R170,R171,R223,R224,R333, R334,R337,R341,R407,R488
69	3	CRC82210	RC1608 8.2K 1/10J	1	R380
70	3	CRC82221	RC1608 8.25K 1/10J	1	R358
71	3	CRC10310	RC 1608 10K 1/10J	16	R110,R195,R200,R231,R291,R294,R297,R299, R300,R301,R403,R405,R458,R484,R489,R492,
72	3	CRC12310	RC1608 12K 1/10J	2	R176,R457
73	3	CRC18310	RC1608 18K 1/10J	4	R233,R235,R237,R241
74	3	CRC20310	RC1608 20K 1/10J	2	R360,R364
75	3	CRC27310	RC1608 27K 1/10J	2	R359,R363
76	3	CRC47310	RC1608 47K 1/10J	2	R404,R481
77	3	CRC10410	RC1608 100K 1/10J	1	R181
78	3	CRC22410	RC1608 220K 1/10J	12	R19,R22,R59,R60,R88,R92,R96,R98,R109 R112,R302,R303
79	3	CRC10510	RC 1608 1M 1/10J	4	R120.R130.R198,R373
80	3	CIR29510	REG 1A 2.5VISOT-223T	1	U21
81	3	CIR19810	REG 1A 1.8VITO-252T	2	U22,U33
82	3	CIR39310	REG 1A 3.3VISOT-223J	1	U35
83	3	CIR05013	REG 1A 5VIOPAK-5T	1	U30
84	3	CIR05010	REG 1A 5VITO-252	2	U12,U29
85	3	CIR09010	REG 1A 9V(TO-252)	1	U32
86	3	CIR08010	REG 1A 8V(TO-252)	1	U35
87	3	CIC26010	Dual RS-232 SOIC-16	1	U1
88	3	CIC04014	EEPROM 2K SOIC-8	2	U3,U40
89	3	CIC30010	HEX INVERTER SOIC-14	1	U4
90	3	CIC10012	QUAD VIDEO MUX/DEMUX	1	U41
91	3	CIC16011	BUS S/W TSSOP-8	1	U11
92	3	CIC31010	AUDIO MUX 6-3	1	U10

93	3	CIC14011	VIDEO CONTROLLER	1	U15
94	3	CIC11010	IMAGE PROCESSOR	1	U16
95	3	CIC21010	DAC 24-BIT 2ch	1	U17
96	3	CIC01010	DDR 128M 8X16 TSOP66	2	U18,U19
97	3	CIC04016	EEPROM 64Kbit SOIC-8	1	U20
98	3	CIC03014	FLASH 8M TSOP-4B	1	U23
99	3	CIC07013	AUDIO AMP 15W/ch	1	U26
100	3	CIC19010	CPU 8051 PLCC-44	1	U27
101	3	CIC17011	2-in Multiplexer	1	U28
102	3	CIC24010	V-DETECT 500mA 2.5V	2	U38,U39
103	3	CNW30110	30P 1.25 SVD RA	1	J8
104	3	CNH06190	HDMI 19 SMT RA	1	J10
105	3	CNW15110	15P 1.25 SMD RA	1	CN17
106	3	CXT20130	X-TAL 20.25M 13p	1	X1
107	3	CXT14150	X-TAL 14.31818M 16p	1	X2
108	3	CXT24200	X-TAL 24.000M 20p	1	X3
109	3	CPB50109	LEP MAIN H02		
110	3	CRA18110	RA 1608 180 1/10J	2	RA10,RA12
111	3	CXC05012	SRAM 256K	1	U24
112	3	CRC36210	RC 1608 3.6K 1/10J	1	R459

B.O.M – POWER BOARD

NO	Part Name	LOCATION	SPEC1	Q'TY	SPEC 2
1	PCB		APAT-42(FR-4, .6T, 245*140mm)		
2	FUSE	F1	T5A H 250V(LEAD TYPE) 50CT	1	
3	SCR	SCR1	BT169D(TO-92)	1	PCR406J
4	VARISTOR	VA1	TVR14D621K(7.5mm)	1	CNR 14D 621K
5	THERMISTOR	TH1,2,3	DSC 10D-15(7.5mm)	3	
6	CAP M.P	CX1	275VAC X2 684K(22.5mm)	1	
7	CAP M.P	CX2	275VAC X2 224K(22.5mm)	1	
8	CAP CERAMIC	CY5	250VAC AD102M	1	250VAC NK102M
9	CAP CERAMIC	C46	1KV 102K(5mm)	1	
10	CAP CERAMIC	C47	1KV 222K(5mm)	1	
11	CAP CERAMIC	C20,27,CY2,4	250VAC AD471K	4	250VAC NK471K
12	CAPACITOR M.F	C6	MPP500V 474J(22.5mm)	1	PMS 500V 474J(22.5mm)
13	CAPACITOR M.F	C25,31	MPP 800V 104J(16mm)	2	PHS 800V 104J
14	CAPELECT	C8	HE 450V 220uF (P35*H30*10mm)	1	HP,PDA 450V 220uF
15	CAPELECT	C59,60,63,65	RD 25V 47uF(5*11mm)	4	KM 25V 47uF(5*11mm)
16	CAPELECT	C7	RD 25V 100uF(6.3*11mm)	1	KM 25V 100uF(6.3*11mm)
17	CAPELECT	C2,3,4,5	RD 35V 1000uF(12.5*20mm)	4	KM 35V 1000uF(12.5*20mm)
18	CAPELECT	C49,51	RD 10V 1000uF(10*12.5mm)	2	KM 10V 1000uF(10*12.5mm)
19	CAPELECT	C50	RD 10V 2200uF(10*20mm)	1	KM 10V 2200uF (10*20mm)
20	CAPELECT	C54,55,61	RD 10V 4700uF(12.5*25mm)	3	KM 10V 4700uF(12.5*25mm)
21	CAPELECT	C32	RD 50V 4.7uF(5*11mm)	1	KM 50V 4.7uF(5*11mm)
22	CAPELECT	C41,44	RD 16V 470uF(8*12mm)	2	KM 16V 470uF(8*12mm)
23	CAPELECT	C39,43	RD 35V 470uF(10*16mm)	2	KM 35V 470uF(10*16mm)
24	CAPELECT	C30,115	RD 50V 10uF(5*11mm)	2	KM 50V 10uF(5*11mm)
25	CAPELECT	C73,74	RD 50V 100uF(8*11.5mm)	2	KM 50V 100uF(8*11.5mm)
26	CAPELECT	C72	RD 10V 220UF(5.0*11mm)	1	KM 10V 220UF(5.0*11mm)
27	DIODE BRIDGE	BD1	D15SB60	1	D15XB60
28	DIODE	D1	1N5406	1	
29	DIODE	D15,16	SB560	2	
30	DIODE	D2	STTH15R06D(TO-220)	1	
31	DIODE F.R	D9,17,20,21,23,24	HER108	6	HER108
32	DIODE	D13	1N4148	1	

33	DIODE	D3	STPS40H100CW(TO-3P)	1	
34	DIODE	D18	SFF1606G(TO-220FP)	1	
35	DIODE	D14	STPS2045CT(TO-220)	1	
36	DIODE	D12	SFF1604G(TO-220FP)	1	
37	IC	IC5	IR21571PBF(DIP-16)	1	
38	IC	IC8	AP1501 T5L(TO-220-5L)	1	
39	IC	IC13	KA317L(TO-92)	1	
40	IC	IC11	KA278R33(TO-220FP-4L)	1	KIA278R33
41	IC REGULATOR	IC3,9	KA78L15(TO-92)	2	
42	IC SHUNT	IC7,10	SL431A(TO-92)	2	KIA431A
43	RTANSFORMER	T1	APWS-37-T1(EER4954)	1	APWS-37-T1(EER4954)
44	RTANSFORMER	T3	ACRP-32S-T3(EFD225)	1	ACRP32S-T3(EFD2525)
45	CHOKE-BAR	L5	120uH(DR12*11mm)	1	
46	CHOKE-BAR	T2	APWS-42-T2 (EER4042-250uH)	1	APWS-42-T2(EER4042-250uH)
47	CHOKE-NORMAL	L7,8	NVA175-60110ND	2	
48	LINE FILTER	LF2	DV505180BS	1	
49	CHOKE-BAR	L2,3,4,6	0.6uH(3*10)-7mm	4	
50	CHOKE-BAR	L1	3uH(5*20)	1	
51	PHOTO COUPLER	PC1,2,3,4,5	LTV817B	5	
52	CONNECTOR	P801	YW396-03AV	1	
53	FET	Q3	STW26NM60(TO-3P)	1	
54	FET	Q8	STP4NK80ZFP(TO-220FP)	1	
55	FET	Q4,6	STP11NM60FP(TO-220)	2	SPP11N60C3
56	TRANSISTOR	Q14	KTD1691Y(TO-126)	1	KSD1691Y(TO-126)
57	RESISTOR SURGE	R21	1/2W 910K 5%	1	
58	RESISTOR SURGE	R26	1/2W 4.7M 5%	1	
59	RESISTOR M.O.R	R86	1W 1	1	
60	RESISTOR W/W	R59	3N 0.2 5%	1	
61	RESISTOR MPR	R35	10W 0.12 5%(10mm)	1	
62	RESISTOR TFR	R30	TFR 5W 4.7 OHM J 131(10mm)	1	
63	RESISTOR	R22,23	1Φ 0.01 10%(10mm)	2	
64	RESISTOR	R65	1/8W 8.2KF	1	
65	RESISTOR M.O.R	R107,108	3W 68K 5%(MINI)	2	
66	RESISTOR M.O.R	R33	3W 470 5%(MINI)	1	
67	RESISTOR M.O.R	R67	1W 47K 5%	1	

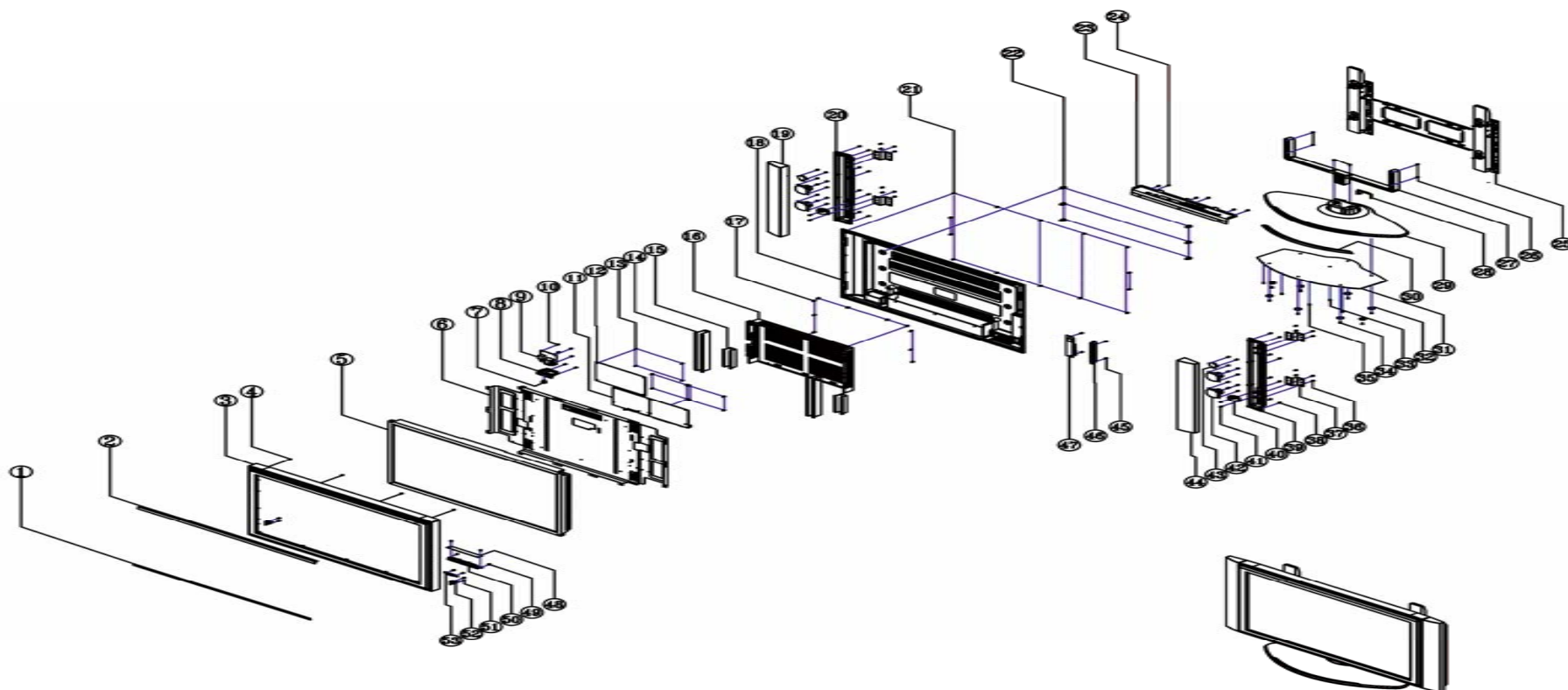
68	RESISTOR W/W	R99	1N 0.8 5%	1	
69	RESISTOR M.O.R	R66	1W 22 5%	1	
70	BEAD CORE	BEAD1	SAT3580L	1	
71	CONNECTOR	CN4	SMW250-11P	1	
72	CONNECTOR	CN5	SMW250-10P	1	
73	CONNECTOR	CN2A,CN2B	20010WS-14P	2	
74	CONNECTOR	CN3	SMW250-4P	1	
75	H/SINK	HS101(Q4,Q6)	HS101-ACRP-32S (L50*H31*T10)	1	
76	H/SINK	HS102(BD1)	HS102-ACRP-32S (L70*H31*T10)	1	
77	H/SINK	HS103(Q3,Q8,D2)	HS103-ACRP-32S (L90*H31*T10)	1	
78	H/SINK	HS104 (D3,D12,D14,D18)	HS104-ACRP-32S (L110*H31*T10)	1	
79	H/SINK	HS105(IC8), HS106(IC11)	HS:TO-220P(15*30*11)	2	
80	SCREW-MACHINE	Q4,Q6,Q8,D2,D12, D14,D18	MA PH 3*10 Ni(PW/SW)	7 3	
81	SCREW-MACHINE	BD1, Q3, D3	MA PH 3*12 Ni(PW/SW)	2	
82	SCREW-MACHINE	IC8, IC11	TAPTITE P3*8	2	
83	SIL PAD	D2,D14	SIL-PAD 900S (TO-220:L13*H18)	2	
84	SIL PAD	Q3,D3	SIL-PAD 900S (TO-3:L19*H23)	2	
85	SCREW-BUSHING	D2,D14	3PH1	2	
86	TUBE	F101	25mm*7mm	1	
87	CAP CERAMIC(SMD)	C22,28,53	0805 X7R 25V 103K	3	
88	CAP CERAMIC(SMD)	C14	0805 X7R 25V 202K	1	
89	CAP CERAMIC(SMD)	C23,33,66	0805 X7R 25V 102K	3	
90	CAP CERAMIC(SMD)	C17	0805 NPO 25V 101J	1	
91	CAP CERAMIC(SMD)	C36	0805 NPO 25V 221J	1	
92	CAP CERAMIC(SMD)	C71	0805 NPO 25V 681J	1	
93	CAP CERAMIC(SMD)	C40,70	0805 X7R 25V 474K	2	
94	CAP CERAMIC(SMD)	C69	0805 NPO 50V 471J	1	
95	CAP CERAMIC(SMD)	C9,13,16,21,24,26,38, C42,45,48,52,56,62, C64,67	0805 X7R 25V 105K	15	
96	CAP CERAMIC(SMD)	C1,19,29,37,57,58,68	0805 X7R 25V 104K	7	
97	CAP CERAMIC(SMD)	C35	0805 X7R 25V 472K	1	
98	CAP CERAMIC(SMD)	C34,76	0805 Y5V 25V 225Z	2	
99	RESISTOR(SMD)	R106	2012, 2R2	1	
100	RESISTOR(SMD)	R84	2012, 000J	1	
101	RESISTOR(SMD)	R103	2012, 1.2KF	1	
102	RESISTOR(SMD)	R115	2012, 1.5K	1	

103	RESISTOR(SMD)	R37	2012, 1.8K	1	
104	RESISTOR(SMD)	R10,39,48,81,98	2012, 10K	5	
105	RESISTOR(SMD)	R36,58	2012, 10KF	2	
106	RESISTOR(SMD)	R42	2012, 11K	1	
107	RESISTOR(SMD)	R28	2012, 130KF	1	
108	RESISTOR(SMD)	R47,88	2012, 100KF	2	
109	RESISTOR(SMD)	R45,54	2012, 15	2	
110	RESISTOR(SMD)	R117	2012, 15K	1	
111	RESISTOR(SMD)	R31	2012, 27K	1	
112	RESISTOR(SMD)	R63	2012, 18KF	1	
113	RESISTOR(SMD)	R38,41,50,57,89,109	2012, 1K	6	
114	RESISTOR(SMD)	R76,79	2012, 2.2K	2	
115	RESISTOR(SMD)	R32	2012, 200	1	
116	RESISTOR(SMD)	R90,91,92,93,95	2012, 20K	5	
117	RESISTOR(SMD)	R63	2012, 20KF	1	
118	RESISTOR(SMD)	R53	2012, 22K	1	
119	RESISTOR(SMD)	R64	2012, 240	1	
120	RESISTOR(SMD)	R24	2012, 240K	1	
121	RESISTOR(SMD)	R19	2012, 270K	1	
122	RESISTOR(SMD)	R43,71,83	2012, 2KF	3	
123	RESISTOR(SMD)	R12	2012, 3.3KF	1	
124	RESISTOR(SMD)	R7,13,25	2012, 300K	3	
125	RESISTOR(SMD)	R14,44,46,60	2012, 30K	4	
126	RESISTOR(SMD)	R100	2012, 330F	1	
127	RESISTOR(SMD)	R52,49,27,62	2012, 33K	4	
128	RESISTOR(SMD)	R102	2012, 7.5K	1	
129	RESISTOR(SMD)	R18	2012, 3KF	1	
130	RESISTOR(SMD)	R11,80	2012, 4.7K	2	
131	RESISTOR(SMD)	R87,61	2012, 43KF	2	
132	RESISTOR(SMD)	R29,73	2012, 47	2	
133	RESISTOR(SMD)	R78,116	2012, 470	2	
134	RESISTOR(SMD)	R96,105	2012, 47K	2	
135	RESISTOR(SMD)	R5	2012, 4R7	1	
136	RESISTOR(SMD)	R96	2012, 5.6KF	1	
137	RESISTOR(SMD)	R40	2012, 510	1	
138	RESISTOR(SMD)	R75	2012, 560	1	

139	RESISTOR(SMD)	R82	2012, 6.2KF	1	
140	RESISTOR(SMD)	R56	2012, 6.8KF	1	
141	RESISTOR(SMD)	R1,2,3,4	2012, 62K	1	
142	RESISTOR(SMD)	R97	2012, 680	1	
143	RESISTOR(SMD)	R68	2012, 7.5KF	1	
144	RESISTOR(SMD)	R74	2012, 8.2KF	1	
145	RESISTOR(SMD)	R101	2012, 1M	1	
146	RESISTOR(SMD)	R77,85	3216, 000J	2	
147	RESISTOR(SMD)	R70,72	3216, 100K	2	
148	RESISTOR(SMD)	R16,114	3216, 1K	2	
149	RESISTOR(SMD)	R110,111,112,113	3216, 33K	4	
150	RESISTOR(SMD)	R20	3216, 390KF	1	
151	RESISTOR(SMD)	R9,15	3216, 470KF	2	
152	RESISTOR(SMD)	R104	3216, 6.8KF	1	
153	IC(SMD)-PFC	IC2	13002(SO-8)	1	
154	IC(SMD)-INVERTER	IC4	KA2904D(SO-8)	1	
155	IC(SMD)-PWM	IC12	FAN7601MX(SO-8)	1	
156	DIODE SW(SMD)	D5,6,7,8,10,11,19	BAV70(SOT-23)	7	
157	DIODE ZENNER(SMD)	ZD3,4	5.6VY(SOT-23)	2	
158	DIODE ZENNER(SMD)	ZD9	18VY(SOT-23)	1	
159	DIODE ZENNER(SMD)	ZD5,6	15VY(SOT-23)	2	
160	DIODE ZENNER(SMD)	ZD10,11	20VY(SOT-23)	2	
161	DIODE ZENNER(SMD)	ZD8	36VY(SOT-23)	1	
162	DIODE ZENNER(SMD)	ZD1,2,7	27VY(SOT-23)	3	
163	TR(SMD)	Q2,5,7,12	SBT2907A(SOT-23)	4	
164	TR(SMD)	Q1,9,10,11,13	SBT2222A(SOT-23)	5	
165	BOX		A05-404 BOX	0.0625	
166	PAD		APKT-32 PAD	0.125	
167	PARTITION	PARTITION-A	APKT-32 PA	0.56	
168	PARTITION	PARTITION-B	APKT-32 PB	0.19	
169	LABEL		38*6mm	1	
170	SILICON OIL	BD1,Q4,Q6,Q8,D12,D18 IC8,IC11	HC-300	0.2g	
171	SILANT		LDC-737	1.0ml	
172	BUBBLE BAG		290*150mm	1	
173	SMD-BOND		HT-130A	0.016ml	

Date are subject to changes without prior notice

EXPLODED VIEW



PART LIST

NO.	PART NAME	QTY	REMARKS
1	Deco Lower	1	Mirror
2	Deco Upper	1	AL
3	Front Cover	1	ABS
4	Screw	4	M3x5 (ZN)
5	LCD Panel	1	LC420W02
6	Cover LCD	1	SECC 1.2T
7	Power Switch	1	ABS
8	Cover AC Socket	1	ABS
9	PCB Cord Power	1	PCB ASSY
10	SCREW	5	M3x5 (ZN)
11	PCB Main	1	PCB ASSY
12	PCB Power	1	PCB ASSY
13	SCREW	12	M3x5 (ZN)
14	Wall Mounting Bracket	2	SEC 1.6T
15	Bracket Hint Support	2	SECC 1.0T
16	Case Shield	1	SECC 1.0T
17	Screw	9	M3x5 (ZN)
18	Cover Back	1	ABS
19	Speaker Cover L	1	ABS
20	Speaker Cover R	1	ABS
21	Screw	12	PTC4x14 (BK)
22	Screw	6	M8 x15 (BK)
23	Bracket I/O	1	SECC 1.0T
24	Screw	1	M4 x 12 (BK)
25	Wall Mount Assy	1	Assy
26	Screw	6	M6 x 15 (BK)
27	Support Stand	1	Die Casting
28	Cover Wire	1	ABS
29	Stand Base	1	ABS
30	Deco Stand	1	ABS
31	Stand Base Plate	1	GI 3.0T
32	Foot Rubber	8	NBR
33	Screw	1	M4 x 12 (BK)
34	Screw	8	PTC 4 x 14 (BK)
35	Screw	4	PTC3 x 10 (BK)
36	Screw	16	PTC4 x 14 (BK)
37	Bracket Speaker	4	SECC 1.6T
38	Screw	16	PTC3 x 10 (BK)
39	Speaker Cover Back R	1	ABS
40	Speaker Elbow	2	ABS
41	Screw	12	PTC3 x 10 (BK)
42	Woofers	4	
43	Tweeter	2	
44	Speaker Cover Front R	1	ABS
45	Screw	4	M3 x5 (BK)
46	Cover Side AV	1	ABS
47	PCB Side AV	1	PCB Assy
48	PCB OSD	1	PCB Assy
49	Screw	4	PTC 3 x10 (BK)
50	Knob Function	1	ABS
51	Screw	4	PTC 3 x10 (BK)
52	PCB Speaker Earphone	2	PCB Assy
53	PCB LED	1	

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WALL-MOUNTING BRACKET INSTALLATION GUIDE

READ CAREFULLY BEFORE INSTALLATION!
THE INSTALLATION GUIDE SHOULD BE RETAINED FOR FUTURE REFERENCE.

Caution:

1. Do NOT attempt to install the TV by yourself to avoid mistakes or hazard. Refer all installation to qualified servicing personnel.
2. DO NOT install the TV on a wall aslope or a wall that makes the TV screen sloping over 25° off plumb line. Otherwise, it may cause tumble or injury.
3. One must follow the instructions in this guide to correctly install the TV.
4. It requires more than one person to install the TV.
5. Before installation, examine whether the wall conforms to the specifications and whether the supplied parts can be fixed on it. The wall for mounting should sustain the weight of TV and speakers e.g. cement wall or brick wall. DO NOT attempt to install an area with standard building rigidity, which sustains the weight of the TV and speakers. If the rigidity of the wall can not be measured, every mounting hole should sustain a frontal force over **75N**, and a shearing force of over **150N**.
6. Use the specified electric drill and drill bit for drilling. The drilling holes should conform to the specifications.
7. To avoid fire and shock, do NOT place radiator, heater or humidifier below the installed TV.
8. The TV should be kept away from moisture, sensors and power line. The TV should be kept away from impact and vibration.
9. Ensure that the power supply be disconnected before installation for fear of fire and shock.

Wall-mounting Installation Steps:

1. Take out the bracket from the package and check if there are serious defects (e.g. infirm juncture).
2. Adjust the bracket to the desired angle. Use bolt 7 to adjust the angle by meeting holes of column beam2 and holes of lever 4.
3. Drill locating holes in the specified dimension in a vertical wall of concrete or brick. The hole size should be 11mm. The hole depth should accommodate the expanding tube of the bolt.
4. Fix the bolts into the drilled holes in step3, and then cover each bolt with a metal washer. Meet the four mounting holes in the bracket with the four bolts in the wall, cover each bolt with a metal washer, and then fasten with a screw nut. Check its rigidity by pulling the bracket.
5. Fix the fixture disk to the back cover of the TV using six M4x20 bolts.
6. Wall-mount the TV by putting the six-fixture disk into the six mounting holes A.

